

IN THE CLAIMS:

Please amend Claims 1 to 3, 6 to 8, 11 to 13, 23, 24 and 28 as shown below.

The claims, as pending in the subject application, read as follows:

1. (Currently Amended) A print control apparatus which can communicate with a plurality of printing apparatuses via a predetermined communication medium, comprising:

first converting means for functioning as a common printer driver for receiving from a graphic engine drawing information generated by the graphic engine from output data generated by an arbitrary application and for converting the received drawing information into independent data which does not depend on each of the plurality of printing apparatuses, the converted independent data being stored in a spooler; converting drawing information which is required from an application into independent data which does not depend on each of said printing apparatuses;

despooling means for despooling the independent data stored in the spooler such that one of a plurality of printer drivers may generate print control information specific to a corresponding one of the plurality of printing apparatuses based on contents of the despoiled independent data, and for retaining the independent data in the spooler even after despooling the independent data; a plurality of second converting means for converting said independent data into print control information that is peculiar to the printing apparatus that is selected and for transferring the print control information to each corresponding printing apparatus;

discriminating means for discriminating an occurrence of a print processing error by monitoring a print processing state of ~~any~~ the one of the printing apparatuses apparatus which corresponds to the one printer driver; and ~~for a time interval from a start of the converting process by any one of said second converting means; and~~

control means for selecting ~~another~~ any one of the plurality of printer drivers corresponding to another one of the plurality of printing apparatuses when it is determined by said discriminating means that the print processing error has occurred in the one printing apparatus, and for controlling said despooling means to despool the independent data retained in the spooler so as to generate print control information by the other printer driver. ~~said second converting means corresponding to the set other printing apparatus when it is determined by said discriminating means that said print processing error has occurred in said one of the printing apparatuses.~~

2. (Currently Amended) An apparatus according to claim 1, wherein said ~~the~~ print processing error includes ~~a conversion processing error by said any one of the second converting means, a transfer error of said print control information which is converted by said any one of the second converting means, and an engine operation error of any selected~~ the one of the printing apparatuses apparatus.

3. (Currently Amended) An apparatus according to claim 1, further comprising:

~~storing means for storing said independent data converted by said first converting means;~~

setting means for setting, for each of the plurality of every printing apparatus apparatuses, the printing apparatus of a next priority to which ~~said~~ the independent data stored in ~~said storing means~~ the spooler should be transferred when ~~said~~ the print processing error occurs; and

memory means for storing a list of the printing apparatuses of a next priority which have been set by said setting means and to which the ~~said~~ independent data should be transferred,

and wherein said control means selects ~~any one of said second converting means~~ the other printer driver corresponding to another printing apparatus set in the list of the printing apparatuses of the next priority stored in said memory means.

4. (Original) An apparatus according to claim 1, wherein said printing apparatus includes a local printer and network printers.

5. (Original) An apparatus according to claim 4, wherein said network printers include:

a first network printer which is connected to said predetermined communication medium via a server; and

a second network printer which is directly connected to said predetermined communication medium.

6. (Currently Amended) A data processing method of a print control apparatus which can communicate with a plurality of printing apparatuses via a predetermined communication medium, comprising:

a first converting step of receiving from a graphic engine converting drawing information generated by the graphic engine from output data generated by an arbitrary application and converting the received drawing information into independent data which does not depend on each of the plurality of printing apparatuses, the converted independent data being stored in a spooler; ~~which is required from an application into independent data which does not depend on each of said printing apparatuses;~~

despooling step of despooling the independent data stored in the spooler such that one of a plurality of printer drivers may generate print control information specific to a corresponding one of the plurality of printing apparatuses based on contents of the despoiled independent data, wherein the independent data is retained in the spooler even after despooling the independent data; ~~a plurality of second converting steps of converting said independent data converted by said first converting step into print control information that is peculiar to the printing apparatus that is selected and transferring said print control information to each corresponding printing apparatus;~~

a discriminating step of discriminating an occurrence of a print processing error by monitoring a print processing state of any the one of said printing apparatus which corresponds to the one printer driver; ~~and apparatuses for a time interval from a start of the converting process by any one of said second converting steps; and~~

a selecting step of selecting another any one of the plurality of printer drivers ~~second converting steps~~ corresponding to another one of the plurality of printing

~~apparatuses~~ ~~the set other printing apparatus~~ when it is determined by said discriminating step that ~~said~~ the print processing error has occurred in ~~the~~ said ~~any one of the printing apparatuses~~ apparatus, and for controlling said despooling means to despool the independent data retained in the spooler so as to generate print control information by the other printer driver.

7. (Currently Amended) A method according to claim 6, wherein the ~~said~~ print processing error includes an engine operation error of the one printing apparatus. ~~a conversion processing error by said any one of the second converting steps, a transfer error of said print control information which is converted by said any one of the second converting steps, and an engine operation error of any selected one of the printing apparatuses.~~

8. (Currently Amended) A method according to claim 6, further comprising:

~~a storing step of storing said independent data converted by said first converting step into a memory;~~

a setting step of setting, for each of the plurality of printing apparatuses, ~~every printing apparatus;~~ the printing apparatus of a next priority to which ~~said~~ the independent data stored in the spooler ~~said memory~~ should be transferred when ~~said~~ the print processing error occurs; and

a registering step of registering a list of the printing apparatuses of a next priority which have been set by said setting step and to which the said independent data should be transferred, ~~into said memory,~~

and wherein in said selecting step, the other printer driver ~~any one of the second converting steps~~ corresponding to another printing apparatus set in the list of the printing apparatuses of the next priority ~~stored in said memory~~ is selected.

9. (Original) A method according to claim 6, wherein said printing apparatus includes a local printer and network printers.

10. (Original) A method according to claim 9, wherein said network printers include:

a first network printer which is connected to said predetermined communication medium via a server; and

a second network printer which is directly connected to said predetermined communication medium.

11. (Currently Amended) A memory medium in which a computer readable program for controlling a data processing apparatus which can communicate with a plurality of printing apparatuses via a predetermined communication medium has been stored, wherein said program comprises:

a first converting step of receiving from a graphic engine ~~converting~~ drawing information generated by the graphic engine from output data generated by an

arbitrary application and converting the received drawing information into independent data which does not depend on each of the plurality of printing apparatuses, the converted independent data being stored in a spooler; which is required from an application into independent data which does not depend on each of said printing apparatuses;

a plurality of second converting steps of converting said independent data converted by said first converting step into print control information that is peculiar to the printing apparatus that is selected and transferring said print control information to each corresponding printing apparatus;

despooling step of despooling the independent data stored in the spooler such that one of a plurality of printer drivers may generate print control information specific to a corresponding one of the plurality of printing apparatuses based on contents of the despoiled independent data, wherein the independent data is retained in the spooler even after despooling the independent data;

a discriminating step of discriminating an occurrence of a print processing error by monitoring a print processing state of the one printing apparatus which corresponds to the one printer driver; and for a time interval from a start of the converting process by any one of said second converting steps; and

a selecting step of selecting another any one of the plurality of printer drivers the second converting steps corresponding to another one of the plurality of printing apparatuses the set other printing apparatus when it is determined by said discriminating step that said the print processing error has occurred in said the one of the printing apparatus, and for controlling said despooling step to despool the independent data retained

in the spooler so as to generate print control information by the other printer driver
apparatuses.

12. (Currently Amended) A medium according to claim 11, wherein
said the print processing error includes an engine operation error of the one printing
apparatus ~~a conversion processing error by said any one of the second converting steps, a~~
~~transfer error of said print control information which is converted by said any one of the~~
~~second converting steps, and an engine operation error of any selected one of the printing~~
apparatuses.

13. (Currently Amended) A medium according to claim 11, wherein
said program further comprises:

~~a storing step of storing said independent data converted by said first~~
~~converting step into a memory;~~

a setting step of setting, for each of the plurality of printing apparatuses,
~~every printing apparatus;~~ the printing apparatus of a next priority to which said the
independent data stored in the spooler ~~said memory~~ should be transferred when the said
print processing error occurs; and

a registering step of registering a list of the printing apparatuses of a next
priority which have been set by said setting step and to which said the independent data
should be transferred, ~~into said memory;~~

and wherein in said selecting step, ~~any one of the second converting steps~~
the other printer driver corresponding to another printing apparatus set in the list of the
printing apparatuses of the next priority ~~stored in said memory~~ is selected.

14. (Original) A medium according to claim 11, wherein said printing
apparatus includes a local printer and network printers.

15. (Original) A medium according to claim 14, wherein said network
printers include:

a first network printer which is connected to said predetermined
communication medium via a server; and

a second network printer which, is directly connected to said predetermined
communication medium.

16. (Original) An apparatus according to claim 1, further comprising
second discriminating means for discriminating a compatibility between the printing
apparatus of the next priority selected by said selecting means and a printing apparatus of a
previous priority,

and wherein said control means transfers the converted print control
information to the printing apparatus of the next priority when it is determined by said
second discriminating means that there is the compatibility between the printing apparatus
of the next priority and the printing apparatus of the previous priority.

17. (Original) A method according to claim 6, further comprising:
a second discriminating step of discriminating a compatibility between the printing apparatus of the next priority selected by said selecting step and a printing apparatus of a previous priority; and
a transferring step of transferring the converted print control information to the printing apparatus of the next priority when it is determined by said second discriminating step that there is the compatibility between the printing apparatus of the next priority and the printing apparatus of the previous priority.

18. (Original) A medium according to claim 11, wherein said program further comprises:

a second discriminating step of discriminating a compatibility between the printing apparatus of the next priority selected by said selecting step and a printing apparatus of a previous priority; and

a transferring step of transferring the converted print control information to the printing apparatus of the next priority when it is determined by said second discriminating step that there is the compatibility between the printing apparatus of the next priority and the printing apparatus of the previous priority.

19. (Original) An apparatus according to claim 1, further comprising:
means for, when the print in said printing apparatus is unsuccessfully completed and when the print cannot be performed even in the printing apparatus on an output destination side after the change, notifying the user of such a fact; and

means for allowing the user to select whether the subsequent print is continued or not and, when the user selects the stop of the print, allowing the printing apparatus before the change to re-execute the print.

20. (Original) An apparatus according to claim 19, further comprising means for modifying print data which is sent to the printing apparatus on the basis of the data that does not depend on the printing apparatus and substituting a print instruction of the user in the case where the print instruction of the user cannot be executed because of a shortage of an ability of the printing apparatus after the change.

21. (Original) A method according to claim 6, further comprising the steps of:

when the print in said printing apparatus is unsuccessfully completed and when the print cannot be executed even in the printing apparatus on an output destination side after the change, notifying the user of such a fact; and

allowing the user to select whether the subsequent print is continued or not and, when the user selects the stop of the print, allowing the printing apparatus before the print to re-execute the print.

22. (Original) A method according to claim 21, further comprising the step of modifying print data which is sent to the printing apparatus on the basis of the data that does not depend on the printing apparatus and substituting a print instruction of the

user in the case where the print instruction of the user cannot be executed because of a shortage of an ability of the printing apparatus after the change.

23. (Currently Amended) A computer readable memory medium to store a computer program which enables an arbitrary printing apparatus to execute a print, wherein said program comprises the steps of:

converting device-independent data ~~which is~~ formed by a print control means ~~and does not depend on a printing apparatus~~ into print data for printing by a to said arbitrary first printing apparatus, wherein the device-independent data does not depend on a particular printing apparatus;

transmitting the said print data to the first printing apparatus;

monitoring a state of the ~~until a completion of the print of said transmitted~~ print data for print completion;

when the said print is unsuccessfully completed, changing to a second printing apparatus on an output destination side on the basis of the device-independent said data, ~~which does not depend on the printing apparatus;~~ converting the print data into the print data specific to the second printing apparatus, ~~after the change;~~ and executing the print;

when a print instruction of the user, which the first printing apparatus is capable of executing, ~~before said change~~ cannot be executed as it is by the second printing apparatus, ~~on the output destination side after the change;~~ notifying the user of such a fact; and

allowing the user to select whether or not to print using the second printing apparatus, and the subsequent print is continued or not and, when the user elects not to print using the second printing apparatus, ~~selects the stop of the print~~, allowing the first printing apparatus ~~before the change~~ to re-execute the print.

24. (Currently Amended) A medium according to claim 23, wherein said program further comprises the step of, when the print instruction of the user cannot be executed because of a shortage or of an ability of the second printing apparatus, ~~after the change~~, modifying the device-independent print data that is sent to the printing apparatus ~~on the basis of said data which does not depend on the printing apparatus~~ and substituting the print instruction of the user.

25. (Original) An apparatus according to claim 1, wherein said independent data is a drawing object.

26. (Original) A method according to claim 6, wherein said independent data is a drawing object.

27. (Original) A medium according to claim 11, wherein said independent data is a drawing object.

28. (Currently Amended) A medium according to claim 23, wherein said device-independent ~~independent~~ data is a drawing object.